

## REMARKS

Applicant acknowledges receipt of an Advisory Action dated August 28, 2007. In this response, Applicant has canceled claims 5 and 7 without prejudice or disclaimer. In addition, Applicant has amended claims 1, 3-4, 6, and 12. Support for these amendments may be found in the specification as originally filed, *inter alia*, in paragraphs [0054]-[0085] and FIG. 2. Following entry of these amendments, claims 1-4, 6, and 8-12 are pending in the application.

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

### Rejection Under 35 U.S.C. §102/103

On page 2 of the Office Action, the PTO has maintained the rejection of claims 1-4 and 8-12 under 35 U.S.C. §102(a) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent 6,584,034 to Takamura *et al.* (hereafter "Takamura") in view of U.S. Patent 5,364,984 to Arntz *et al.* (hereafter "Arntz"). Applicant respectfully traverses this rejection for the reasons set forth below.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See generally MPEP §2131.

Alternatively, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

In this response, Applicant has amended claims 1 and 12 to recite that "the carbon monoxide concentration catalyst comprises: 5 weight percent of a first component selected from the group consisting of iron, cobalt, nickel, manganese, and copper; and 0.5 to 2 weight

percent of a second component selected from the group consisting of platinum, rhodium, ruthenium, palladium, lanthanum, neodymium, cerium, and praseodymium.”

Here, Takamura and Arntz each fail to disclose and, in the context of the alternative §103 rejection, collectively fail to teach or suggest, a method wherein “a carbon monoxide adsorption amount is adjusted from 0.189 to 2.741 mL/cat.g, wherein the carbon monoxide concentration catalyst comprises: 5 weight percent of a first component selected from the group consisting of iron, cobalt, nickel, manganese, and copper; and 0.5 to 2 weight percent of a second component selected from the group consisting of platinum, rhodium, ruthenium, palladium, lanthanum, neodymium, cerium, and praseodymium” as recited in independent claims 1 and 12.

Applicant acknowledges that Example 5 of Takamura includes 1 wt% platinum. However, Applicant respectfully points out that in Example 5 of Takamura, the amount of first component Nickel is only 1.0 wt%. Claims 1 and 12 recite that the “catalyst comprises: 5 weight percent of a first component selected from the group consisting of iron, cobalt, nickel, manganese, and copper.”

The PTO has suggested that the 1% Pt of Takamura is not seen to differ from the 1% Pt of the examples of the present application. Applicant respectfully disagrees and refers to the remarks set forth in previously filed responses. The CO adsorption amounts of Takamura and Arntz differ from those of currently pending claims 1 and 12 since the dispersity, the average particle size and the surface area of the metal of Takamura and Arntz are different than those of the metal of the presently claimed invention. Accordingly, Takamura and Arntz cannot disclose, teach or suggest the feature “a carbon monoxide adsorption amount is adjusted from 0.189 to 2.741 mL/cat.g, wherein the carbon monoxide concentration catalyst comprises: 5 weight percent of a first component selected from the group consisting of iron, cobalt, nickel, manganese, and copper; and 0.5 to 2 weight percent of a second component selected from the group consisting of platinum, rhodium, ruthenium, palladium, lanthanum, neodymium, cerium, and praseodymium” as recited in currently pending claims 1 and 12.

For at least these reasons, Applicant submits that the outstanding rejection based upon Takamura and Arntz is improper and ought to be withdrawn. Since claims 2-4 and 8-11 depend from independent claim 1, Applicant submits that they are allowable for the same reason as claim 1.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection of claims 1-4 and 8-12 under §102/§103.

### **Rejection Under 35 U.S.C. §103**

On page 2 of the Office Action, the PTO has maintained the rejection of claims 1-5 and 8-12 under 35 U.S.C. §103(a) as allegedly being unpatentable over Takamura. In addition, the PTO has maintained the rejection of claims 6 and 7 under 35 U.S.C. §103(a) as allegedly being unpatentable over Takamura in view of U.S. Patent 6,913,739 to Shore (hereafter “Shore”). Finally, the PTO has maintained the rejection of claim 10 under 35 U.S.C. §103(a) as allegedly being unpatentable over Takamura in view of U.S. Patent 3,584,608 to Shibagaki (hereafter “Shibagaki”). Applicant respectfully traverses these rejections for the reasons set forth below.

In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

For the reasons discussed above, Applicant submits that Takamura fails to teach or suggest a method wherein “a carbon monoxide adsorption amount is adjusted from 0.189 to 2.741 mL/cat.g, wherein the carbon monoxide concentration catalyst comprises: 5 weight percent of a first component selected from the group consisting of iron, cobalt, nickel, manganese, and copper; and 0.5 to 2 weight percent of a second component selected from the group consisting of platinum, rhodium, ruthenium, palladium, lanthanum, neodymium, cerium, and praseodymium” as recited in independent claims 1 and 12. Applicant further submits that neither Shore nor Shibagaki resolve this fundamental deficiency of Takamura.

For at least this reason, Applicant submits that the outstanding rejections based upon the combinations of Takamura and Shore and Takamura and Shibagaki are improper and ought to be withdrawn.

If an independent claim is nonobvious under §103, then any claim depending therefrom is nonobvious. *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). See MPEP 2143.03. Thus, Applicant submits that claims 2-4, 6, and 8-11, each of which ultimately depends from independent claim 1, are also non-obvious at least by virtue of their dependency from claim 1.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection under §103.

### CONCLUSION

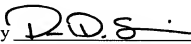
Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date October 19, 2007  
FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 672-5540  
Facsimile: (202) 672-5399

By   
Paul D. Strain  
Registration No. 47,369  
Attorney for Applicant